

REMARKS

The above amendments and the following remarks are fully and completely responsive to the Office Action dated June 22, 2005. Claims 1, 4-8 and 10-14 are pending in this application. By this Amendment, claim 3 has been canceled and claim 1 has been amended. In the outstanding Office Action, claims 13 and 14 were objected to as being dependent upon a rejected base claim and claims 1, 3-8 and 10-12 were rejected under 35 U.S.C. § 103(a) (three different rejections). No new matter has been added. Claims 1, 4-8 and 10-14 are presented for reconsideration.

Claim Objection

Claims 13 and 14 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As discussed below, claim 1, from which claims 13 and 14 indirectly depend, is allowable. Accordingly, Applicants request reconsideration and withdrawal of the objection to claims 13 and 14.

35 U.S.C. § 103(a)

Claims 1, 3, 5, 6, 8, 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kraus et al. (U.S. Patent No. 6,587,979, "Kraus") in view of Takano (U.S. Patent No. 6,097,206). Claim 3 has been canceled, rendering the rejection moot with respect to this claim. Regarding claims 1, 5, 6, 8, 11 and 12, Applicants respectfully traverse this rejection.

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kraus. Applicants respectfully traverse this rejection.

Claims 4 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kraus in view of Leas et al. (U.S. Patent No. 5,600,257, "Leas"). Applicants respectfully traverse this rejection.

Claim 1, as amended, recites in part:

...a decision circuit, coupled to the pattern generating circuit and the semiconductor device, for receiving test data originating from the second pattern data from the semiconductor device and determining the test result of the timing dependency test using the test data and the second pattern data, wherein the pattern generating circuit includes

a pattern memory for storing the second pattern data for the timing dependency test,

a timing generator, coupled to the pattern memory, for generating a reference clock signal and receiving the second pattern data for the timing dependency test from the pattern memory, and

a wave formatter, coupled to the timing generator, for receiving the second pattern data for the timing dependency test from the timing generator in accordance with the reference clock signal and providing the second pattern data for the timing dependency test to the semiconductor device as front pattern data, wherein the wave formatter generates back pattern data by inverting the front pattern data in accordance with a control signal.

The foregoing amendment to claim 1 is supported on page 5, line 29 to page 6, line 20 of the present specification.

Applicants have carefully reviewed Kraus, Takano and Leas. None of these references disclose a pattern generating circuit that includes a pattern memory for

storing the second pattern data for the timing dependency test; a timing generator, coupled to the pattern memory, for generating a reference clock signal and receiving the second pattern data for the timing dependency test from the pattern memory; and a wave formatter, coupled to the timing generator, for receiving the second pattern data for the timing dependency test from the timing generator in accordance with the reference clock signal and providing the second pattern data for the timing dependency test to the semiconductor device as front pattern data, the wave formatter generating back pattern data by inverting the front pattern data in accordance with a control signal, as recited in amended claim 1.

In contrast, Takano only discloses reading out the stored data from the memory 16 and supplying the data to the second logical comparator 28 (see column 8, lines 52-56).

Consequently, none of Kraus, Takano or Leas, taken alone or in combination, teach and/or suggest the invention recited in claim 1.

Specifically, none of the cited references teach and/or suggest a pattern generating circuit, coupled to the semiconductor device, for providing the previously stored second pattern data for the timing dependency test to the semiconductor device. Similarly, the cited references fail to teach and/or suggest a timing generator, coupled to the pattern memory, for generating a reference clock signal and receiving the second pattern data for the timing dependency test from the pattern memory. Rather, the cited references fail to teach and/or suggest the recited wave formatter. Claims 4-8 and 10-12 depend either directly or indirectly from claim 1.

Therefore, Applicants request reconsideration and withdrawal of the rejections of claims 1, 4-8 and 10-12 under 35 U.S.C. § 103(a) (three different rejections).

Conclusion

Applicants' amendments and remarks have overcome the objection and rejections set forth in the Office Action dated June 22, 2005. Specifically, Applicants' amendments to claim 1 and remarks have overcome the objection to dependent claims 13 and 14. Applicants' cancellation of claim 3 and amendments to claim 1 have distinguished claim 10 from Kraus and claims 1, 5, 6, 8, 11 and 12 from Kraus and Takano, thus overcoming the rejections to these claims under 35 U.S.C. § 103(a). Applicants' amendments and remarks have also distinguished claims 4 and 7 from Kraus and Leas and thus overcome the rejection of these claims under 35 U.S.C. § 103(a). Therefore, Applicants request reconsideration and allowance of claims 1, 4-8 and 10-14.

Applicants submit that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned attorney by telephone if it is believed that such contact will expedite the prosecution of the application.

In the event that this paper is not considered to be timely filed, Applicants respectfully petition for an appropriate extension of time.

The Commissioner is authorized to charge payment for any additional fees which may be required with respect to this paper to our Deposit Account No. 01-2300, making reference to attorney docket number 108075-00075.

Respectfully submitted,
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